



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,917	09/29/2003	Karl S. Johnson	MTIPAT.118C1C1	2090
20995 7590 03/12/2007 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER ASSESSOR, BRIAN J	
			ART UNIT	PAPER NUMBER
			2114	
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE	DELIVERY MODE	
3 MONTHS		03/12/2007	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/12/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcarter@kmob.com
eOAPilot@kmob.com

Office Action Summary	Application No. 10/675,917	Applicant(s) JOHNSON ET AL.	
	Examiner Brian J. Assessor	Art Unit 2114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/23/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/22/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-6 have been canceled.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 2114

Claims 7, 12, 16, 32, 39, 41 and 45 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,338,150.

Claims 11 and 25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 11 of U.S. Patent No. 6,681,342.

Claim 43 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 28 of U.S. Patent No. 6,681,342. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claim 1 of patent 6,338,150 contains every element of claims 7, 12, 16, 32, 39, 41 and 45 of the instant application and as such anticipates claims 7, 12, 16, 32, 39, 41 and 45 of the instant application.

Claims 11 and 25 of patent 6,681,342 contains every element of claim 11 of the instant application and as such anticipates claims 11 and 25 of the instant application.

Claim 28 of patent 6,681,342 contains every element of claim 43 of the instant application and as such anticipates claim 43 of the instant application.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or **anticipated by**, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140

Art Unit: 2114

F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). " ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 7-10, 12, 14-21, 23, 25, 29-42, and 45- 50 are rejected under 35 U.S.C. 102(e) as being anticipated by Martinez (6,188,973).

As per claim 7, Martinez teaches:

A computer monitoring and diagnostic system, comprising:

a computer having a housing; (Martinez column 5, lines 11-16)

wherein the computer includes a plurality of canisters, each of the canisters

having a plurality of card slots, (Martinez column 5, lines 11-16)

Art Unit: 2114

wherein the computer is configured to control the power to the canisters.

(Martinez column 11, lines 32-39)

As per claim 8, Martinez teaches:

The system of claim 7, wherein at least one of the canisters is removable from the computer. (Martinez column 6, lines 30-32)

As per claim 9, Martinez teaches:

The system of claim 7, additionally comprising a microcontroller which is configured to log conditions about the canister to a recording system. (Martinez column 11, lines 15-17)

As per claim 10, Martinez teaches:

The system of claim 9, wherein the microcontroller is configured to log messages to non-volatile random access memory. (Martinez column 10, lines 17-22; column 11, lines 15-17)

As per claim 12, Martinez teaches:

A computer monitoring and diagnostic system, comprising:

a computer; (Martinez column 5, lines 11-16)

at least one sensor, located within the computer, configured to sense conditions within the computer. (Martinez column 7, lines 11-16)

As per claim 14, Martinez teaches:

The system of claim 12, wherein the computer is configured to maintain a system log in a non-volatile random access memory. (Martinez column 10, lines 17-22; column 11, lines 15-17)

As per claim 15, Martinez teaches:

The system of claim 12, wherein sensing the conditions comprises monitoring the speed of a canister fan. (Martinez column 7, lines 11-16)

As per claim 16, Martinez teaches:

A computer monitoring and diagnostic system, comprising:

a computer, having a computing device and a housing; (Martinez column 5, lines 11-16)

at least one sensor, located within the computer, configured to sense conditions within the computer; (Martinez column 7, lines 11-16)

at least one microcontroller, located within the computer, wherein the microcontroller is configured to process requests for conditions from the computer and responsively provides sensed conditions to the computer. (Martinez column 8, lines 15-19)

As per claim 17, Martinez teaches:

Art Unit: 2114

The system of claim 16, wherein the computer includes a plurality of canisters and the microcontroller is configured to control power to the canisters. (Martinez column 11, lines 32-39)

As per claim 18, Martinez teaches:

The system of claim 16, wherein the microcontroller is configured to control power to a slot. (Martinez column 11, lines 32-39)

As per claim 19, Martinez teaches:

The system of claim 16, wherein the microcontroller is configured to log conditions to a recording system. (Martinez column 11, lines 15-17)

As per claim 20, Martinez teaches:

The system of claim 16, wherein the microcontroller is configured to log messages to non-volatile random access memory. (Martinez column 10, lines 17-22; column 11, lines 15-17)

As per claim 21, Martinez teaches:

The system of claim 16, wherein the microcontroller is configured to control the system power to the computer. (Martinez column 11, lines 32-39)

As per claim 23, Martinez teaches:

Art Unit: 2114

The system of claim 16, wherein one of the microcontrollers in the microcontroller network is connected to a canister. (Martinez figure 1, elements 26 and 28)

As per claim 25, Martinez teaches:

A microcontroller for diagnosing and managing the conditions of a computer, the microcontroller network comprising:

at least one microcontroller, located within the computer, wherein the microcontroller is configured to manage the environmental conditions within the computer. (Martinez column 7, lines 11-16)

As per claim 29, Martinez teaches:

he microcontroller of claim 25, wherein the microcontroller is configured to check for system faults. (Martinez column 7 lines 11-16)

As per claim 30, Martinez teaches:

he microcontroller of claim 25, wherein the microcontroller is configured to maintain a system log in a non-volatile random access memory. (Martinez column 10, lines 17-22; column 11, lines 15-17)

As per claim 31, Martinez teaches:

Art Unit: 2114

he microcontroller of claim 25, wherein a selected one of the at least one microcontroller is configured to monitor the speed of a canister fan. (Martinez column 7 lines 11-16)

As per claim 32, Martinez teaches:

A computer monitoring and diagnostic system, comprising:

a computer, having a plurality of computer-related components, wherein the components have associated environmental and systemic conditions; (Martinez column 7, lines 11-16)

at least one sensor configured to sense the environmental and systemic conditions, wherein the sensor is located within the computer; (Martinez column 7, lines 11-16)

at least one microcontroller connected to the sensor and the computer. (Martinez column 7, lines 11-16)

As per claim 33, Martinez teaches:

The system of claim 32, wherein the microcontroller is located within the computer. (Martinez column 7, lines 11-16)

As per claim 34, Martinez teaches:

The system of claim 32, wherein the microcontroller is configured- to process requests for environmental or systemic conditions from the computer and is configured

Art Unit: 2114

to responsively provide the environmental or systemic conditions to the computer.

(Martinez column 10, lines 48-51)

As per claim 35, Martinez teaches:

The system of claim 32, wherein the computer-related components comprise at least one component selected from the group consisting of: a system board, a central processing unit (CPU), a CPU fan, a backplane board, a backplane fan, a chassis, a chassis fan, a canister, a canister fan, a PCI card, and a PCI card fan. (Martinez column 7, lines 11-16)

As per claim 36, Martinez teaches:

The system of claim 32, wherein the sensor is configured to detect the temperature levels of selected ones of the computer-related components. (Martinez column 7, lines 11-16)

As per claim 37, Martinez teaches:

The system of claim 32, wherein the sensor is configured to detect the speed of a fan intended to cool down selected ones of the computer-related components. (Martinez column 7, lines 11-16)

As per claim 38, Martinez teaches:

The system of claim 32, wherein the sensor is configured to detect the voltage level applied to selected ones of the computer-related components. (Martinez column 7, lines 11-16)

As per claim 39, Martinez teaches:

A method of monitoring and diagnosing a computer connected to a microcontroller, the method comprising:

receiving from a source a request for the conditions of the computer; (Martinez column 8, lines 15-19)

sensing the conditions of the computer with the microcontroller; (Martinez column 8, lines 15-19)

receiving the sensed conditions in the microcontroller; (Martinez column 8, lines 15-19)

communicating the sensed conditions from the microcontroller to the source of the request. (Martinez column 8, lines 15-19)

As per claim 40, Martinez teaches:

The method of claim 39, wherein sensing the conditions of the computer with the microcontroller comprises detecting a temperature inside the computer. (Martinez column 7, lines 11-16)

As per claim 41 and 42, Martinez teaches:

Art Unit: 2114

Claims 41 and 42 respectively are system claims corresponding to the method claims 39 and 38. Therefore, Claims 41 and 42 are rejected for the same rational set forth in claims 39 and 38.

As per claim 45, Martinez teaches:

A computer monitoring and diagnostic system, comprising a computer, having a computing device and a housing;

at least one sensor, located within the computer, configured to sense conditions within the computer; (Martinez column 8, lines 15-19)

at least one microcontroller, located within the computer, connected to the sensor and the computer, wherein the microcontroller is configured to process requests for conditions from the computer and responsively provides sensed conditions to the computer. (Martinez column 8, lines 15-19)

As per claim 46, Martinez teaches:

The system of Claim 1, wherein the computer includes a plurality of canisters and the microcontroller is configured to control power to the canisters. (Martinez column 11, lines 32-39)

As per claim 47, Martinez teaches:

The system of Claim 1, wherein the microcontroller is configured to control power to a slot. (Martinez column 11, lines 32-39)

As per claim 48, Martinez teaches:

The system of Claim 1, wherein the microcontroller is configured to log conditions to a recording system. (Martinez column 10, lines 17-22; column 11, lines 15-17)

As per claim 19, Martinez teaches:

The system of Claim 1, wherein the microcontroller is configured to log messages to non-volatile random access memory. (Martinez column 10, lines 17-22; column 11, lines 15-17)

As per claim 50, Martinez teaches:

The system of Claim 1, wherein the microcontroller is configured to control the system power to the computer. (Martinez column 11, lines 32-39)

Claims 43 and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Carbonneau (5,586,250).

As per claim 43, Carbonneau teaches:

A method of monitoring system functions of a computer, the method comprising:
controlling a plurality of environmental conditions of the computer using at least one microcontroller; (Carbonneau column 20, lines 15-38)

Art Unit: 2114

receiving a message sent from the system bus to the interconnected microcontroller, the message requesting a change in a selected one of the plurality of environmental conditions; (Carbonneau column 20, lines 15-38)

sending a message from the interconnected microcontroller to the system bus, the message indicating a change in the selected one of the plurality of environmental conditions. (Carbonneau column 20, lines 15-38)

As per claim 44, Carbonneau teaches:

The method of claim 43, wherein the environmental conditions comprise a temperature inside the computer. (Carbonneau column 20, lines 15-6 and 35-38)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martinez (6,188,973) in view of Carbonneau (5,586,250).

As per claim 11, Martinez teaches:

A computer monitoring and diagnostic system, comprising:
a computer; (Martinez column 5, lines 11-16)

Art Unit: 2114

at least one sensor, located within the computer, configured to sense environmental conditions within the computer; (Martinez column 7, lines 11-16)

Martinez does not explicitly disclose a system wherein an actuator configured to modify an environmental condition of the computer.

In column 10, lines 34-38, Carbonneau clearly discloses a system where the fan speed can be adjusted depending on the temperature of a given area. It would have been obvious to a person of ordinary skill in the art to include the environmental adjusting system as taught by Carbonneau in order to create a better controlled computer system environment. This would have been obvious because Carbonneau teaches that the above method is better suited for servicing and monitoring data storage arrays. (Carbonneau column 2, lines 42-48)

As per claim 24:

Martinez does not explicitly disclose a system wherein an actuator connected to the microcontroller, wherein the actuator is configured to modify an environmental condition of the computer.

In column 10, lines 34-38, Carbonneau clearly discloses a system where the fan speed can be adjusted depending on the temperature of a given area. It would have been obvious to a person of ordinary skill in the art to include the environmental adjusting system as taught by Carbonneau in order to create a better controlled computer system environment. This would have been obvious because Carbonneau

Art Unit: 2114

teaches that the above method is better suited for servicing and monitoring data storage arrays. (Carbonneau column 2, lines 42-48)

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martinez (6,188,973) in view of Ghislain Gabriel Vecoven (2004/0210800).

As per claim 22:

Martinez fails to explicitly disclose wherein the microcontroller is connected to an I2C bus.

In paragraph 0083, Ghislain Gabriel Vecoven clearly discloses a system wherein I2C bus is commonly used when monitoring environmental conditions by a processor. It would have been obvious to a person of ordinary skill in the art to include the I2C bus as taught by Ghislain Gabriel Vecoven for ease of communication of environmental information. This would have been obvious because Ghislain Gabriel Vecoven teaches that the above method is better suited for hardware fault management in a computer system. (Ghislain Gabriel Vecoven paragraph 0003)

Claims 13, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martinez (6,188,973) in view of Lui (5,337,413).

As per claim 13:

Art Unit: 2114

Martinez does not explicitly disclose a system wherein sensing the conditions comprises checking for a microcontroller bus time-out.

In column 6, lines 19-22, Lui clearly teaches a system which the processor can monitor for a bus time-out. It would have been obvious to a person of ordinary skill in the art at the time of invention to include the monitoring system as taught by Lui on order to check for time-outs. This would have been obvious because Lui teaches that the above method is better suited for a more efficient health monitoring system. (Lui column 3, lines 30-38)

As per claim 26:

Martinez does not explicitly disclose a system wherein sensing the conditions comprises checking for a microcontroller bus time-out.

In column 6, lines 19-22, Lui clearly teaches a system which the processor can monitor for a bus time-out. It would have been obvious to a person of ordinary skill in the art at the time of invention to include the monitoring system as taught by Lui on order to check for time-outs. This would have been obvious because Lui teaches that the above method is better suited for a more efficient health monitoring system. (Lui column 3, lines 30-38)

As per claim 27:

Martinez does not explicitly disclose a system wherein the microcontroller is configured to check for a manual system board reset.

Art Unit: 2114

In column 5, lines 1-14, Lui clearly teaches a system that checks for numerous different reset signals. It would have been obvious to a person of ordinary skill in the art at the time of invention to include the reset checking system as taught by Lui in order to allow for monitoring for multiple reset signals. This would have been obvious because Lui teaches that the above method is better suited for a more efficient health monitoring system. (Lui column 3, lines 30-38)

As per claim 28:

Martinez does not explicitly disclose a system wherein the microcontroller is configured to check for software reset command.

In column 5, lines 1-14, Lui clearly teaches a system that checks for numerous different reset signals. It would have been obvious to a person of ordinary skill in the art at the time of invention to include the reset checking system as taught by Lui in order to allow for monitoring for multiple reset signals. This would have been obvious because Lui teaches that the above method is better suited for a more efficient health monitoring system. (Lui column 3, lines 30-38)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Art Unit: 2114

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Assessor whose telephone number is (571) 272-0825. The examiner can normally be reached on M-F 9:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571)272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BA



SCOTT BADERMAN
SUPERVISORY PATENT EXAMINER